Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1474 Natural Resources and Environmental Research and Education: Master Wildlifer/Master Naturalist

Conducts statewide Master Wildlife programs to improve wetland and watershed management as a means of preserving water quality and wetland and aquatic wildlife habitat. Conducts statewide Master Naturalist programs to increase the public's understanding and awareness of natural resource management and to build a network of natural resource ambassadors. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the response and prevention of irresponsible human behavior or non-

human natural resource destruction.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$41,836	\$0	\$9,590	\$0	\$0	\$32,246	2.27

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Develop and deliver statewide Master Wildlifer short courses for forest and farm owners, and standardized training for Master Naturalists, SC Department of Natural Resources biologists and administrators, and other interested agencies. Explore alternative methods of delivering Master Wildlifer, primarily over satellite and as a web-based course. Develop local chapters and conduct SC Master Naturalist training programs.

Outcome Measures:

Develop and deliver education programs on Master Wildlifer and Master Naturalist for farm and forest land owners, county Extension agents and potential volunteers to preserve natural resources and wildlife habitats. Master Wildlifer was delivered to 18 satellite downlink sites in S.C. and reached 241 landowners who manage 124,462 acres. Master Naturalist volunteers provided 9, 600 hours of service removing invasive species such as beach vitex, monitoring water quality, and assisting state park rangers, primarily in coastal and upstate counties.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

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1475 Rural Community Enhancement and Improvement

Engage in rural community enhancement and improvement activities that are linked to community image, sustainable economic development, and improved quality of life. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the conditions for economic growth

Strategy: Provide for a more unified and focused effort in the marketing of our State's assets.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$553,706	\$0	\$236,276	\$0	\$0	\$317,430	11.00

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Develop and conduct community improvement programs, such as the SC Design Arts Partnership, a collaborative effort by Clemson University, the SC Downtown Development Association, and the SC Budget & Control Board that helps rural communities design improvements for economic revitalization. Engage citizens in agritourism and agribusiness development projects. Facilitate the work of local task forces and groups that formulate action plans and policies. Work with appropriate agencies to achieve information technology equity for rural areas.

Outcome Measures:

Develop and deliver education programs on community enhancement for citizens engaged in economic and tourism development, nonprofit organization boards and groups. Design Arts Partnership visioning sessions were conducted in Allendale, Olanta, Little Mountain, Liberty and Westminster to begin planning community improvements. Research focused on data analyses and program assessment for rural economic development, particularly in the agribusiness sector.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1476 Government and Public Affairs Research and Education

Conducts applied research and education in public policy areas to promote discussion and action on critical issues facing South Carolina, the Southeast, and the nation. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the conditions for economic growth

Strategy: Provide for resources and infrastructure for a more skilled and prepared workforce.

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FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs	
\$98,490	\$0	\$32,914	\$0	\$0	\$65,576	2.00	

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Distribute information on issues affecting South Carolina today and those that will be important in the future via the Jim Self Center on the Future web site. Present information on educational finance and operational policy to appropriate state and local leaders to enhance the public debate. Expand the civic discussion in South Carolina and increase public participation in governmental operations through partnerships and training sessions.

Outcome Measures:

Develop and deliver education programs to community, business, and citizen organizations on research developed at the Thurmond Institute. Specific applications include the costs of growth, fiscal analyses, regional cost/benefit analyses, state issues analyses, and assessments of the state's economic well-being.

Agency: P20 - Clemson PSA **Functional Group:** Economic

Development & Natural Resources

1477 Agricultural Education Teachers' Salaries (pass-thru)

Provide statewide leadership for agricultural education programs in the public schools for South Carolina. Agricultural Education prepares students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber and natural resources systems. The program provides Future Farmers of America (FFA) and adult education activities, such as leadership development, work experiences, internship and job training. Proviso 72.42 of the FY 2008 Appropriations Act authorizes Clemson-PSA to transfer these funds to the Department of Education for Agriculture Education teacher salary adjustments.

Statewide Result Area: Improve K-12 student performance

Strategy: Provide the public clear, specific, and timely data about the effectiveness and

competitiveness of the public schools in the state. This strategy will include standardizing and simplifying the graduation rate calculation so that it reflects high school completion rates. Additionally, parents will be provided with child-specific

performance data.

FY 2008-09

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Agency Activity Inventory by Agency **Appropriation Period: FY 2008-09**

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$800,011	\$405,599	\$0	\$0	\$0	\$394,412	0.00

Other Fund - Subfund No & Title:

4973-EIA

Budgetary Program No.: IV

Expected Results:

Coordinate and structure agricultural education programs, Future Farmers of America (FFA), and the SC Association of Young Farmers activities in the state's public schools.

Outcome Measures:

Conduct agricultural education programs in SC high schools. 10,549 students are in agricultural education programs; of that number 5,459 are members of Future Farmers of America (FFA).

Agency: P20 - Clemson PSA Functional Group: Economic

> Development & Natural Resources

1478 Administration

Administration for Clemson University-PSA is an aspect of our organization that is constantly monitored for indications of its efficiencies and effectiveness. Our organizational functions are statewide and highly diversified to meet the requirements of research and Extension. Our research facilities are in numerous locations on-campus and across the state. Additionally, much of our administrative functions are focused on generating outside research funding. The regulatory functions of PSA require very precise management of records and documents for federal and state regulations. These functions are in addition to the traditional administrative functions of account management, clerical support, building maintenance, utilities and communication costs, auditing, and accountability. Section 46-7-90 of the SC Code of Laws authorizes Clemson-PSA to receive and expend federal funds provided to the state's land-grant colleges.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Administration

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$3,979,487	\$3,406,795	\$326,292	\$0	\$0	\$246,400	34.00

Other Fund - Subfund No & Title:

3035-Op Revenue

IA, IB, IIA,IIB,III,IV,V,VI,VII,VIIIC **Budgetary Program No.:**

> 12/3/2008 Page 4

Expected Results:

The administration functions of our division are expected to give our organization: An adequate and safe work environment to carry out state-of-the-art research, development and information dissemination; Support for all state, federal and university mandated compliance regulations for animals, plants and human research; A fully compliant financial audit for federal, state or institutional requirements.

Outcome Measures:

Increase the rate of return on state dollars from outside funding sources for research and outreach activities. Continue to increase the effectiveness and efficiency of all functions of PSA. Maintain financial audit findings in compliance with federal, state or institution regulations. Record all relevant data in support of regulatory activities across the state to ensure a safe and adequate food and water supply and to address environmental issues.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1479 Distance Education: Radio Productions

Delivers information on Clemson research and education programs to targeted and mass audiences. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$122,576	\$22,375	\$0	\$0	\$0	\$100,201	2.00

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Produce radio programs and a supporting web site to deliver research and education information.

Outcome Measures:

Deliver educational information to an average of 20,000 listeners through public radio programs.

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Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1480 Distance Education: Television, Web and Print Productions

Delivers information on Clemson research and education programs to targeted and mass audiences. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$1,636,888	\$1,263,899	\$270,145	\$0	\$0	\$102,844	30.47

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Produce television programs and web sites to deliver research and education information; produce supporting print materials as needed.

Outcome Measures:

Maximize efficiencies in educational programs by using mass media outlets and the web-based federal eXtension initiative.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1481 Bioengineering Alliance

The SC Bioengineering Alliance is a state-mandated collaborative effort among Clemson University, the University of South Carolina, and the Medical University of South Carolina to promote, strengthen, and develop biomedical engineering education, research, and technology transfer across the state to advance basic biomedical research and medical care, enhance bioengineering research and education at the participating universities, and support the regional economy. The Bioengineering Alliance was established as a separate program within Clemson PSA by the FY 1990 - 1991 General Appropriations Act.

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Statewide Result Area: Improve the state's post-secondary education system and cultural

resources

Strategy: Provide for employability and quality of life opportunities for our graduates.

FY 2008-09

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$0	\$0	\$0	\$0	\$0	\$0	1.05

Other Fund - Subfund No & Title:

Budgetary Program No.: VI, VIIIC

Expected Results:

Foster communication among organizations and academic disciplines to identify and pursue opportunities for collaborative research, education, and technology transfer. Develop programs that share facilities, equipment, and expertise across the state to advance healthcare, particularly in tissue engineering and regenerative medicine.

Outcome Measures:

A board of directors was established with representatives from the 3 research universities. Two statewide workshops were conducted to identify applications of bioengineering to address digestive and neural diseases. These workshops resulted in 3 proposals to the National Institutes of Health. A statewide workshop is planned for late 2008 to address issues associated with healthcare quality, medical informatics, and disease management. Research and education collaborations among the 3 universities resulted in 12 publications, 4 patents and additional partnerships to improve healthcare and the regional economy.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1482 Sustainable Agricultural Production Systems: Horticultural Crops

Conducts statewide research and education programs to improve the production efficiency, environmental sensitivity, and profitability of horticultural crop management systems. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the marketing and enhancement of the economic and social value of

SC's natural resources.

FY 2008-09

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Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs	
\$5,527,976	\$3,815,113	\$1,146,652	\$0	\$0	\$566,211	55.04	_

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Conduct research and education programs to: Improve profitability of horticultural cropping systems, Reduce negative environmental impacts of horticultural cropping systems, and Encourage producers to adopt new horticultural production systems.

Outcome Measures:

Develop and deliver education programs on horticultural crop production for agricultural producers and Extension personnel. 350,250 acres were farmed using integrated crop management and more than 76,589 acres were planted in high-value alternative crops such as kohlrabi, cilantro, and leeks. Ongoing research seeks to improve disease management practices, evaluate plant reaction to drought and heat stress, reduce pesticide runoff in plant nurseries, increase production of high-value niche crops, and improve turfgrass management strategies. 2 research disclosures were submitted.

Agency: P20 - Clemson PSA

Functional Group: Economic

Development & Natural Resources

1483 The South Carolina Institute for Energy Studies

The South Carolina Institute for Energy Studies (SCIES) is a state chartered research and development organization established in 1984 via the FY 1984 - 1985 General Appropriations Act. SCIES is administratively housed at Clemson University, reporting to the Vice President for Research.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$0	\$0	\$0	\$0	\$0	\$0	2.05

Other Fund - Subfund No & Title:

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Budgetary Program No.: V, VIIIC

Expected Results:

Through interaction with all departments at Clemson University, all universities within South Carolina, state agencies, federal agencies, and private industry throughout the nation: Promote energy research and development in and for the state; Transfer energy technology developed by others to South Carolina applications; Contribute to national energy issues in areas of excellence; Promote state-wide energy education activities.

Outcome Measures:

Accomplishments include completing the Strategic and Tactical Renewable Energy Independence Commission study for the SC Legislature, installing two coastal wind monitoring sites to determine the cost and benefits of wind-generated electricity in SC, beginning research on the feasibility of using agriculture waste streams to generate electricity, planting several varieties of switchgrass to assess their potential as an energy crop, continuing research to develop clean methods of coal-generated electricity, and completing an assessment of the potential for early adoption of hydrogen fuel systems in SC.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1484 Rural Community Leadership Development

Conducts Palmetto Leadership training that provides community leadership development training, facilitates strategic planning for economic development, public issues education, youth leadership, and serves as a collaborative agency with other leadership program sponsors. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the conditions for economic growth

Strategy: Provide for a more unified and focused effort in the marketing of our State's assets.

FY 2008-09

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$695,863	\$347,475	\$285,584	\$0	\$0	\$62,804	8.00

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Develop and deliver education programs on leadership, team-building, strategic planning, and effective operations for civic and community leaders and nonprofit organizations. Promote participation in collaborative task forces to build leadership skills to address statewide economic and community development issues. Conduct youth leadership programs and workshops to enhance leadership, communication, team building, and citizenship skills.

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Conduct training in natural resources needs and urbanization patterns for civic and community leaders.

Outcome Measures:

Develop and deliver education programs on leadership for municipal and community leaders, particularly in addressing natural resource needs, population growth, and urbanization patterns. Outreach programs included leadership training for 4,937 individuals; grant-writing workshops for 650 community leaders to build local capacity; and seminars for 290 women to enhance their leadership potential.

Agency: P20 - Clemson PSA Functional Group: Economic

> Development & Natural Resources

1485 Natural Resources and Environmental Research and Education: Recreation and Tourism

Conducts statewide education programs to promote environmentally sound natural resource recreation and tourism opportunities in South Carolina. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Provide for the response and prevention of irresponsible human behavior or non-

human natural resource destruction.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs	
\$195,882	\$0	\$66,296	\$0	\$0	\$129,586	2.20	

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Develop and deliver educational programming on the interaction of water quality and recreation and tourism activities. Provide additional training to nature-based tourism professionals to ensure that the content and delivery of their education programs is accurate and of high quality.

Outcome Measures:

Develop and deliver educational programs on the nature-based tourism industry for recreation and tourism operators, Extension county agents, government officials, land management, agency personnel, and citizens. Research seeks to develop agro-tourism, outdoor recreation and nature-based tourism as alternate revenue sources.

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Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1486 Natural Resources and Environmental Research and Education: Alternative Income Opportunities for Landowners

Conducts statewide education programs to assist landowners in developing alternative income sources from natural resources, with a focus on wildlife resources. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the conditions for economic growth

Strategy: Provide for a more unified and focused effort in the marketing of our State's assets.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$40,775	\$0	\$21,234	\$0	\$0	\$19,541	2.00

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Develop and deliver educational programs for farm and forest landowners, Extension agents, and natural resource professionals on alternative income opportunities from natural resources, with an emphasis on wildlife resources. Continue development of the Pee Dee Research & Education Center as a demonstration site for integrated farm, forest and wildlife management illustrating both management and income opportunities from wildlife.

Outcome Measures:

Develop and deliver education programs on alternative income opportunities for farm and forest landowners, Extension agents, and natural resource professionals. Extension programs reached 552 landowners with training on wildlife management as an alternative income source. Research included an economic impact assessment of hunting in rural areas and the economic impact of wildlife management for forest landowners.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1487 Natural Resources and Environmental Research and Education: Water Quality and Quantity

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Conducts statewide research and education programs to address the impacts of land use on water quality and quantity, and to promote Best Management Practices for homeowners, farmers, landowners, municipal officials, volunteers, and youth. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the response and prevention of irresponsible human behavior or non-

human natural resource destruction.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$2,764,803	\$1,622,395	\$488,639	\$275,000	\$0	\$378,769	21.85

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Conduct research to develop best management practices that reduce pollution, erosion, and storm water run-off, and thereby improve water quality. Conduct education programs to train municipal officials, watershed coordinators, project managers, consultants, contractors, and citizens in these practices. Storm water management programs include Nonpoint Education for Municipal Officials and Carolina Clear. Conduct research to understand the chemical, biological and physical dynamics of lakes and streams. Conduct research related to understanding economic, socio-cultural and ecosystem dynamics of watersheds. Undertake initiatives to study policy and political issues that affect lakes, rivers, streams and aquatic systems across South Carolina and the Southeast.

Outcome Measures:

Develop and deliver education programs on water quality for municipal officials, communities, contractors, homeowners, farmers, landowners, and youth. Conduct a statewide Water Resources Conference for universities, state and federal agencies, nongovernmental organizations, and the public in fall 2008. Develop a statewide focus on watershed management as the EPA-DHEC designated Watershed Center of Excellence for SC. Improve farm water availability through irrigation systems education, reduce fecal coliform levels in rural watersheds through education programs to exclude livestock from streams and to replace aging septic systems. Research is ongoing in nonpoint source pollution control, the effect of urbanization on contamination of surface waters, and the health of stream ecosystems.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1488 Natural Resources and Environmental Research and Education

Conducts statewide research to protect and enhance the wildlife, soil and natural resources in South Carolina. Sections 46-7-10

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et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the marketing and enhancement of the economic and social value of

SC's natural resources.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
	Tulius	I ulius	Recuiring		Tulius	TILS
\$2,108,629	\$1,406,613	\$581.873	\$0	\$0	\$120,143	26.10

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Conduct research to: Develop agriculture and forestry practices that protect wildlife and the environment, and reduce forest fuel loads; Develop techniques for managing forest drainage systems; Determine the toxicity of metals and pesticides to aquatic animals and the impacts of non-point source pollution on wildlife; Develop sensors, tools and methodologies for soil, pest and water management to enhance environmental sustainability.

Outcome Measures:

Develop and deliver education programs on natural resources. Prescribed fire programs reached landowners and foresters who manage 80,235 acres. Ongoing research monitors wildlife habitats conditions in Southeastern forests and studies the effects of climate change on coastal marine communities.

Agency: P20 - Clemson PSA **Functional Group:** Economic

Development & Natural Resources

1489 Sustainable Agricultural Production Systems: Nutraceutical Crops

Conducts statewide research and education programs to improve the production efficiency, environmental sensitivity, and profitability of nutraceutical crop management systems. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the response and prevention of irresponsible human behavior or non-

human natural resource destruction.

FY 2008-09

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Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$356,169	\$262,280	\$57,016	\$0	\$0	\$36,873	5.73

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, VIIIC

Expected Results:

Conduct research and education programs to develop crop management and harvesting techniques that improve the production efficiency and profitability of nutraceutical crops.

Outcome Measures:

Research focuses on production methods for high-value nutraceutical crops and produced 1 disclosure and 1 patent application.

Agency: P20 - Clemson PSA **Functional Group:** Economic

Development & Natural Resources

1490 Sustainable Agricultural Production Systems: Organic Crops

Conducts statewide research and education programs to improve the production efficiency, environmental sensitivity, and profitability of organic crop management systems. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$229 676	\$147,076	\$45,404	\$0	\$0	\$37 196	1.50

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Conduct research and education programs to: Develop crop management information about the promising niche market of organic farming; Disseminate information on organic farming systems to current growers and growers

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interested in adopting organic practices.

Outcome Measures:

Develop and deliver education programs to enhance the use of organic farming systems. 53 education programs reached 1,015 participants. Research focused on pest and fertility management strategies for sustainable production.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1491 Reducing the Impact of Animal Agriculture on the Environment

Clemson PSA is the sole source for providing training as required by law for all livestock and poultry producers to receive their waste permit. This program reduces the environmental impact of animal waste through statewide research and education programs for animal agriculture producers. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs	
\$488,870	\$325,672	\$69,641	\$0	\$0	\$93,557	4.40	

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Develop and demonstrate new, cost-effective technologies and practices to reduce the environmental impacts of animal agriculture. Develop and deliver education programs to train and certify animal facility operators and to educate livestock producers on environmentally sound manure treatment, storage and utilization systems, and methods to reduce sediment loading of streams from pastures, holding areas, and land application sites. (Confined Animal Manure Management)

Outcome Measures:

Develop and deliver education programs to certify newly permitted confined-livestock and poultry producers and to provide annual re-certification training for all permit holders, as required by state law. 1,375 livestock producers attended recertification trainings to maintain their permits. Research focused on sustainability of livestock and poultry production.

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Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1492 Agro Medicine (pass-thru)

The S C Agromedicine Program is a cooperative effort between the Medical University of SC (MUSC) and Clemson's Cooperative Extension Service. It provides: 1) Education to physicians, nurses & other health care workers who serve the farming community about farm-related health issues (e.g. pesticide poisoning, insect/spider bites, fire ant sting reactions, noise-induced hearing loss, etc.); 2) Education to pest-control operators, mosquito abatement officials & other agriculture workers regarding health effects of pesticides, risk & personal protection; 3) Education to lay and professional groups regarding food quality / food safety and farm safety issues; 4) Research on farm-related health issues; and 5) Services such as telephone consultations to physicians, the Cooperative Extension Service and individual patients on farm-related health issues. Agromedicine was established as a separate program within Clemson-PSA by the FY 1986-1987 Appropriations Act. Funds appropriated to PSA for Agromedicine are transferred to MUSC annually under a contractual agreement.

Statewide Result Area: Improve the health and protections of our children and adults

Strategy: Provide for measures to increase the number of individuals with a medical home.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$0	\$0	\$0	\$0	\$0	\$0	0.00

Other Fund - Subfund No & Title:

Budgetary Program No.: VII, VIIIC

Expected Results:

Provide teaching, research and service in the area of agromedicine to improve the diagnosis and treatment of agriculture-related health problems, the accuracy of the public's perceptions of food quality and safety and pesticide health effects, and the overall safety and health of the farm population.

Outcome Measures:

Provided 171 consultations in 2007-08 for health care professionals and the public, based on referrals from Clemson Extension and Regulatory Service personnel, health care personnel and individuals, for pesticides in agriculture and the home, arthropod and spider bites and stings, food safety and water and air quality. Made presentations to physicians, farmers and consumers on multiple topics (most frequently food quality and safety and insect sting reactions) during the past year. Continued to collect and publish data on tick-borne diseases, fire ant stings and serious spider bites reported to primary care physicians in SC and emergency room visits and hospitalizations for pesticide poisoning in the state. Completed data collection for the five year period 2002-2006, to be published in 2008. Continued to maintain and utilize a specialized reference library, journal library and a computerized literature data base to support consultations.

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Agency: P20 - Clemson PSA

Functional Group: Economic

Development & Natural Resources

1493 **Agricultural Biosecurity**

The lead agency in South Carolina to provide coordination of statewide surveillance for naturally occurring and introduced diseases and pests of agricultural plants and animals under Homeland Security Presidential Directives 8, 9 and 10. In addition, education programs are developed and implemented for disaster preparedness, prevention, and mitigation for livestock and other animals, whether those disasters are natural or man-made. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
384,211	\$248,386	\$75,033	\$0	\$0	\$60,792	5.00

Other Fund - Subfund No & Title:

3035-Op Revenue

III, IV, VIIIC **Budgetary Program No.:**

Expected Results:

Improve local, state, and regional capabilities to detect, recognize, diagnose, and prevent agroterrorism and threats to food production agriculture by foreign animal diseases, foreign plant diseases, or other disasters that threaten agriculture or food safety.

Outcome Measures:

Develop and deliver education programs for farmers, county and state emergency response personnel and Extension agents focusing on agricultural biosecurity, including agroterrorism prevention, mitigation, response and recovery. Collaborate with other state agencies to develop alert systems and response plans for exotic plant/animal diseases. Conduct training and research on biosecurity issues. Provide educational information for county and state officials through training exercises and through publications such as articles, fact sheets, bulletins and newsletters. Implemented SC AgWatch to enhance on-farm response through increased awareness of foreign animal diseases, biosecurity practices, and notification procedures. Conducted a southeast regional Emergency Disaster Extension Network (EDEN) workshop at Clemson University.

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Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1494 Environmental Horticulture Education

Conducts statewide research and education programs to increase the use of environmentally sound horticultural practices and to protect the quality of the state's soil, air, and water. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$610,243	\$0	\$213,642	\$0	\$0	\$396,601	10.62

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Conduct research and education programs to inform horticulture professionals, master gardeners, and consumers on environmentally sound horticultural practices.

Outcome Measures:

Develop and deliver information on environmentally sound horticultural practices to 23,600 consumers and horticulture professionals via Urban Horticulture Center and Home & Garden Information Center (HGIC) toll-free telephone line. Deliver information through public radio and TV programs and through the HGIC web site (6.5 million visits annually). Provided training to 7,405 consumers and horticulture professionals, trained 397 new Master Gardeners, and provided 42,111 hours of volunteer horticulture services to communities.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1495 Agricultural Biotechnology

Conducts biotechnology research and shares research findings for commercial development through patents and licenses to build the knowledge-based economy. Mass-produces genetic reference libraries for research using high-end robots, sequencers, and physical mapping equipment. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

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Statewide Result Area: Improve the conditions for economic growth

Strategy: Provide for resources and infrastructure for a more skilled and prepared workforce.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$4,085,265	\$3,088,025	\$362,217	\$0	\$0	\$635,023	26.54

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, VIIIC

Expected Results:

Discover and apply significant biotechnology products and processes to improve agriculture, the environment, and human health. Patent and license research discoveries for commercial application to build the knowledge-based economy in South Carolina. Collaborate with SC Bio and the Department of Commerce to recruit biotech companies and assist with new company start-ups.

Outcome Measures:

Discoveries in biotechnology products and processes will be disclosed through research publications and patents, and will be available for commercial application through license agreements. New employment opportunities will be created through biotechnology business recruitment and new company start-ups. Ongoing research focused on improving performance of agricultural crops, the national animal genome study, engineering for a biobased economy, and developing bioinformatics resources. Research produced 4 disclosures, 3 patent applications, and 1 patent.

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Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1496 Risk Management Systems for Agricultural Firms

Provides statewide economic analyses of agricultural enterprises and technologies and education programs to assist farm managers in developing viable business systems. In addition, risk management research is conducted and information is disseminated to agricultural managers. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the conditions for economic growth

Strategy: Provide for a more unified and focused effort in the marketing of our State's assets.

FY 2008-09

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Agency Activity Inventory by Agency

Appropriation Period: FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$1,512,307	\$834,883	\$341,846	\$0	\$0	\$335,578	22.00

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Conduct statewide research and education programs on agricultural market assessment and appropriate marketing strategies for agricultural commodities in South Carolina.

Outcome Measures:

Develop and deliver education programs on risk management for farm and agribusiness managers. Extension programs reached 553 growers.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1497 Integrated Pest Management (IPM) for Agriculture and Forestry

Conducts statewide research and education programs to identify alternative pest control strategies for field crops and landscape/ornamental plants and to reduce dependence on the use of agricultural chemicals by increasing the use of biological controls. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$1,589,217	\$1,136,845	\$256,602	\$0	\$0	\$195,770	17.01

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Agricultural producers and producers of landscape and ornamental plants in South Carolina will adopt and utilize

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integrated pest management (IPM) practices that will reduce the number of pesticides and increase the value of South Carolina's agricultural products.

Outcome Measures:

Conduct statewide research and deliver education programs on integrated pest management for agricultural producers and forest landowners. IPM strategies are used on 44,364 acres of collards, 23,000 acres of cotton and 8,000 acres of peaches. Ongoing research focused on using IPM to protect honey bee colonies and developing IPM strategies for cotton, forest trees and high-value specialty crops.

Agency: P20 - Clemson PSA **Functional Group:** Economic

> Development & Natural Resources

1498 Sustainable Forestry Management and Environmental Enhancement

Conducts statewide research and education programs to develop and demonstrate new methods in ecologically and economically sustainable forest and wildlife management, particularly in restoring forest ecosystems and habitats for endangered species, and developing alternative income sources for landowners. Sections 46-7-10 et seg. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$2,218,256	\$1,620,778	\$335,513	\$0	\$0	\$261,965	26.52

Other Fund - Subfund No & Title:

3035-Op Revenue

III, IV, VIIIC **Budgetary Program No.:**

Expected Results:

Research programs will develop new management practices that promote sustainable use and management of forest resources. Research will include an education component, such as training or demonstrations of new techniques, particularly for industrial and government foresters. Education programs will encourage landowners to adopt and use practices developed through research.

Outcome Measures:

Develop new forest management practices that expand and enhance sustainable forestry practices. Install demonstrations of these techniques for use in educational programs. Through these programs, increase the number of acres of forests in South Carolina using sustainable forestry practices, increase biodiversity in the state, restore longleaf pine ecosystems, and facilitate the conservation of ecosystems. Extension training programs were

> 12/3/2008 Page 21

delivered to 2,150 people who manage 78,000 acres of forest land. Average savings were \$56,000 in management costs. Ongoing research focused on forested wetland ecosystems, the environmental responses to fire and forest management in the SC coastal plain, and modeling the effects of hurricanes on forests in the Southeast. 1 research disclosure and 1 patent application were filed.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1499 Natural Resources and Environmental Research and Education: Nuisance Species

Conducts statewide research and education programs to effectively address and minimize problems with nuisance species that cause significant economic, health and human safety concerns in South Carolina. These species include invasive plants, such as beach vitex and giant salvinia, which compromise water quality and negatively impact revenues from tourism, shipping, fishing, forestry and other industries. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$58,026	\$0	\$36,257	\$0	\$0	\$21,769	2.00

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Develop and deliver education programs for landowners, homeowners, natural resource professionals, and county Extension agents on controlling nuisance species such as beach vitex and giant salvinia, which compromise water quality and negatively impact the coastal environment.

Outcome Measures:

Develop and deliver education programs on nuisance species for landowners, homeowners, natural resource professionals and Extension agents. Extension programs led efforts to eradicate beach vitex on 140 sites and to control phragmites and water hyacinths on more than 1,000 acres on the SC coast. Training workshops to control aquatic invasive species were held for landowners in 17 counties and for Extension agents and SC DNR biologists. A cogongrass survey was conducted at 1,383 sites in 26 counties, and identified the invasive species in 9 counties.

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Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1500 Rural Community Public Issues Education

Conducts education programs on public issues management and certifies facilitators to lead local efforts. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the conditions for economic growth

Strategy: Provide for a more unified and focused effort in the marketing of our State's assets.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs	
119,285	\$0	\$62,120	\$0	\$0	\$57,165	3.59	

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Develop and deliver education programs on facilitation skills and best practices of conflict resolution for use in public meetings and public forums (Public Issues Management School). Partner with state agencies and private interest groups to offer training in facilitation, negotiation, conflict resolution and management, and mediation. Prepare educational materials for the public (print, video, television, and radio) to promote understanding of public issues.

Outcome Measures:

Develop and deliver education programs on public issues for state, federal, and local agency personnel, association members, and citizens. Extension programs included training for 430 individuals in establishing civil societies and a methamphetamize awareness program that reached 5,000 citizens. A partnership with the SC Bar Association produced Project Citizen, a national initiative to develop civic education and engagement programs in middle schools.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1501 Natural Resources and Environmental Research and Education: Coastal Natural

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Hazards

Conducts statewide research and education programs to protect the state's coastal residents from natural disasters, including hurricanes, wind, water and earthquakes. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$0	\$0	\$0	\$0	\$0	\$0	0.00

Other Fund - Subfund No & Title:

Budgetary Program No.: IV, VIIIC

Expected Results:

Develop and evaluate innovative construction techniques to enable residential and low rise commercial structures to better withstand a variety of coastal hazards, including wind, water and earthquake. Develop and deliver education programs on coastal storm planning and preparedness, and hazard resistant coastal construction techniques.

Outcome Measures:

No activity in 08-09

no activity planned in this area

Agency: P20 - Clemson PSA **Functional Group:** Economic

Development & Natural Resources

1502 Rural Community Economic Development

Conducts statewide programs to enhance economic development through workforce analysis, business development strategies and policy formation, and surveys to enhance workforce preparedness and business retention efforts. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the conditions for economic growth

Strategy: Provide for a more unified and focused effort in the marketing of our State's assets.

FY 2008-09

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Agency Activity Inventory by Agency

Appropriation Period: FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$1,578,840	\$992,886	\$537,221	\$0	\$0	\$48,733	23.14

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Conduct county-based programs annually to increase business retention and expansion and workforce preparation, focusing on the least-developed counties. Convey community and regional economic impact assessment data to business leaders and economic development organizations. Provide county and municipal leaders with socioeconomic trend and pattern data to support local economic development strategic planning efforts.

Outcome Measures:

Develop and deliver education programs on business retention and enhancement for business and workforce preparation agencies. Conduct research to expand economic development opportunities in rural communities, particularly in agribusiness, the life sciences, and the knowledge-based economy. 979 participants attended programs to enhance rural economic development. Ongoing research focused on growing capacity in the knowledge economy and building community-based entrepreneurship.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1503 Livestock-Poultry Health Programs: Meat Inspection

Inspects and tests meat and poultry processing operations in South Carolina to ensure the safety of the state's food products of animal origin. Sections 47-4-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to perform these duties as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the minimization of negative effects related to business and population

growth, industrialization and development.

FY 2008-09

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$2,724,435	\$1,184,887	\$1,459,548	\$0	\$0	\$80,000	42.08

Other Fund - Subfund No & Title:

3035-Op Revenue

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Budgetary Program No.: IIA, IIB, VIIIC

Expected Results:

Develop and present a comprehensive training course for all inspection personnel to ensure as safe a meat supply as possible in South Carolina. Develop and maintain the Food Emergency Notification System, a database of SC government agencies and private industry.

Outcome Measures:

Provide inspectors the technical framework to review the Hazard Analysis and Critical Control Point (HACCP) system of official establishments to determine if they are in compliance with Title 9, Code of Federal Regulations, Part 417, HACCP Systems and require corrective action for deficiencies. Work in collaboration with the SC Emergency Management Division to notify state agencies and industry of food recalls, using the Food Emergency Notification System database.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1504 Livestock-Poultry Health Programs: Animal Health and Diagnostic Laboratory

Provides statewide surveillance for diseases that affect both humans and other animals, and provides the diagnostic expertise to support control and eradication of disease of domestic animals. Provides veterinary diagnostic laboratory facilities and expertise to assist state veterinarians in diagnosing diseases found in companion and food animals, as well as in wildlife. Serves as the primary agency for ESF-17 in the State Emergency Operations Plan; provide multi-agency coordination of statewide animal emergency response plans to protect livestock and wildlife, and to support public health and safety. Sections 47-4-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to perform these duties as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the minimization of negative effects related to business and population

growth, industrialization and development.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs	
\$1,132,300	\$990,871	\$0	\$0	\$0	\$141,429	37.25	

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IIA, IIB, VIIIC

Expected Results:

Ensure the safety and health of humans and other animals in South Carolina. Maintain the state's disease-free status by the U.S. Department of Agriculture (USDA) for cattle brucellosis, swine brucellosis, classical swine fever, pseudo-rabies, tuberculosis, and pullorum-typhoid. Implement the National Animal Identification System (NAIS)

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for traceability of disease outbreaks. Maintain a full-time staff of employees who are trained and demonstrate proficiency in specific tests certified by USDA laboratories. Maintain adequate funding, professional and technical staff, facilities and information resources to meet accreditation standards by the American Association of Veterinary Laboratory Diagnosticians (AAVLD). Coordinate the Animal Emergency Response with the County Animal Response Teams (CART), Extension Service, and multi-state agencies.

Outcome Measures:

Monitor livestock/poultry health in state to meet requirement of maintaining certified free status in appropriate disease areas. Monitor and enforce livestock/poultry interstate movement/commerce requirements. Register premises to enhance disease investigation and tracking of animal movement. Led the nation for 2 months in number of premises registered. Completed the AAVLD Accreditation Review. Maintained 100% pass rating on laboratory proficiency testing certifications. Developed regional County Animal Response Teams. Conducted a statewide exercise with the USDA, DHEC, and SCEMD to deploy the National Veterinary Stockpile in response to Avian Influenza.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1505 Regulatory and Public Service Programs: Plant and Seed Certification

Carries out statewide mandated programs for plant and seed certification ensure the quality of fertilizer and lime; the prevention and control of introduced plant pests and pests of honey bees; certification of seed purity/germination; certification for organically produced plants; and certification of freedom from plant pests in nursery, greenhouse and transplants. These mandated services also administer quality assurance/identity preservation for transgenic crops. Since September 11th, the mandate also includes Homeland Security. Our mission is to prevent, mitigate, and respond to agroterrorism. Section 46-7-90 of the SC Code of Laws authorizes Clemson-PSA to receive and expend federal funds provided to the state's land-grant colleges.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the minimization of negative effects related to business and population

growth, industrialization and development.

FY 2008-09

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$1,093,569	\$840,025	\$0	\$0	\$0	\$253,544	31.33

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IA, IB, VIIIC

Expected Results:

Through statewide educational enforcement of legislative mandates: Fertilizer and lime will be of a higher quality.

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Fewer or mitigated introductions of invasive plant pests will occur. Nursery and greenhouses will sell plants with fewer insects or disease pests. There will be less likelihood of agroterrorism. Administration of genetic and quality standards for certification of seed and vegetative propagated materials will ensure less chance of cross contamination. Inspection and certification of plant industry products will allow national and global sales and will support the organic produce industry. Homeland Security will be enhanced through regulation of the sale of fertilizer to reduce the likelihood of its misuse by terrorists.

Outcome Measures:

Sample and analyze over 3,000 fertilizer materials and enforce statute to maintain deficiency rate of less than 20%. Certify plant commodities for shipment by responding to over 1,000 phytosanitary requests within a one-week timeframe and maintain an acceptance rate above 94%. Certify freedom from plant pests in commercial greenhouses, nurseries, dealers, and turf/sod farms by conducting one inspection annually for each of the over 700 licensed nurseries and 300 dealers, achieving a 95% compliance rate. Inspect and certify seed for purity, maintaining a minimum 95% compliance meeting SC Certification Standards. Prevent and mitigate invasive species, concentrating on surveys to detect and mitigation when found: sudden oak death, citrus diseases ornamentals, emerald ash borer, light brown apple moth (peach pest), cogongrass, and tropical soda apple. Reduce the threat of agroterrorism through regulatory exercises, training and equipping staff; permitting for explosive fertilizer sales, and conducting four surveys to detect potential agroterrorism risks.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1506 Boll Weevil Eradication Programs (pass-thru)

Mandated service to administer boll weevil eradication program. Boll weevil eradication program established by Section 46-10-10 et seq. of the SC Code of Laws.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$0	\$0	\$0	\$0	\$0	\$0	0.00

Other Fund - Subfund No & Title:

Budgetary Program No.: IA

Expected Results:

Fewer or mitigated boll weevil infestations will occur.

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Outcome Measures:

Prevent and mitigate boll weevil infestations. All cotton grown in SC will be surveyed for incidence of infestation. The reduction in boll weevil infestations will reduce toxicity and frequency of pesticide applications to cotton.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1507 Regulatory and Public Service Programs: Pesticide Regulation

Carries out statewide mandated programs for pesticide regulation ensure safe and legal use of pesticides and administer pesticide container recycling programs. Since September 11th, the mandate also includes Homeland Security. Our mission is to prevent, mitigate, and respond to agroterrorism. Section 46-7-90 of the SC Code of Laws authorizes Clemson-PSA to receive and expend federal funds provided to the state's land-grant colleges.

Statewide Result Area: Improve the quality of South Carolina's natural resources

 $\textbf{Strategy:} \quad \text{Provide for the protection of outcome-driven policies} \, / \, \text{incentives} \, / \, \text{programs aimed}$

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$2,492,030	\$66,649	\$425,381	\$0	\$0	\$2,000,000	38.09

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IA, IB, VIIIC

Expected Results:

Through statewide educational enforcement of legislative mandates: Pesticide exposure and misuse will be reduced. Groundwater contamination from pesticides will be reduced. SC structures will be better protected from insect attack. Homeland Security will be enhanced through regulation of the use of pesticides to reduce the likelihood of misuse by terrorists.

Outcome Measures:

Reduce S.C. pesticide misuse by making over 2,000 inspections to ensure safe pesticide use and structural pest control compliance with pesticide labels, and state and federal law. Reduce the threat of agroterrorism through regulatory efforts dealing with pesticide use, including aerial applications of pesticides.

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Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1508 4-H and Agricultural & Natural Resource Programs for Youth

Conducts statewide 4-H and research-based agriculture and natural resources education for youth. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve K-12 student performance

Strategy: Provide all students a customized learning experience.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$8,393,177	\$4,190,086	\$1,166,541	\$0	\$0	\$3,036,550	135.92

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Develop and deliver 4-H and other programs to educate families and youth across the state, particularly in the areas of agriculture and natural resources, leadership, service learning, financial and other resource management.

Outcome Measures:

Develop and deliver education programs for youth and their families, with help from a statewide network of trained volunteers. 987 adults were trained as volunteers who worked with 17,472 youth in statewide programs, including natural resources in schools, water quality and conservation projects, outdoor education programs, livestock and crop production, and developing GPS/GIS maps for livestock evacuation during emergencies.

Agency: P20 - Clemson PSA Functional Group: Economic

Development &

Natural Resources

1509 Food Safety and Nutrition

Conducts statewide research and education programs for farmers, food-handling employees, and consumers to ensure the safety and enhance the nutritional value of agricultural food products. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the health and protections of our children and adults

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Strategy: Provide increased access to insurance and private payment for healthcare.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$6,081,118	\$4,073,377	\$1,834,650	\$0	\$0	\$173,091	67.00

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Conduct research and education programs to identify practices to minimize the risk of pesticide residue caused by improper handling of agricultural products and of food-borne illness outbreaks caused by improper handling of food. Develop and deliver educational information and programs on safe food-handling practices to minimize the number of food-borne illness outbreaks. These programs are for food processors and for food service facilities, such as schools, daycare facilities, soup kitchens, and restaurants (Serv-Safe). Develop and deliver educational programs for consumers to help them develop healthy food choices and skills in selecting, purchasing, and preparing foods to reduce the prevalence of obesity and improve healthy lifestyles through EFNEP, the Expanded Food and Nutrition Education Program, and other Extension programs.

Outcome Measures:

Develop and deliver education programs on safe food-handling practices and healthful food choices for consumers, agricultural producers, commercial food handlers, processing and packing industry employees. 709 managers and employees at 397 food service establishments were certified in safe food handling and preparation. Ongoing research focused on active packaging for food safety and stability, control of food-borne pathogens in pre- and post-harvest crop production and food safety in poultry production. Research generated 2 disclosures, 1 patent application, and 1 license agreement.

Agency: P20 - Clemson PSA **Functional Group:** Economic

Development & Natural Resources

1510 Sustainable Agricultural Production Systems: Animal Production Systems

Conducts statewide research and education programs to improve the production efficiency, environmental sensitivity, and profitability of animal production systems. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

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Agency Activity Inventory by Agency Appropriation Period: FY 2008-09

Fodorol

1 Otal	General	r euer ar	Health / Non-	CKI	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$7.024.100	\$5,157,026	\$1.046,843	\$0	\$0	\$820.231	58.42

Hoolth / Non

CDE

Other Fund - Subfund No & Title:

Total

Conorol

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Conduct research and education programs to: Improve the production efficiency of confined animal systems; Improve grazing management practices for increased efficiency of production; Improve marketing of grazing livestock; Protect water quality in and running off from pastures; Provide information on current and emerging specialty animal industries; Increase awareness of the impact of herd health and reproduction on economic efficiency. Support the development of niche markets for beef, dairy, and poultry producers to allow farmers to diversify their operations and make local products available to SC citizens. Develop and implement animal production systems that are economically sustainable and environmentally sound Provide training that will increase herd management skills and assist producers in making informed business decisions.

Outcome Measures:

Develop and deliver education programs on sustainable animal production systems for agricultural producers, Extension and other agency personnel. 7,827 livestock producers attended Extension programs to improve breeding and herd health, implement grazing management and drought response programs, and prepare for natural and biosecurity disasters. Ongoing research focused on forage-finished beef, improved reproductive efficiency in cattle and horses, lowering milk-fat composition in dairy cattle, and improved disease resistance in poultry. Research produced 1 disclosure, 1 patent application, and 1 license agreement.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1511 Natural Resources and Environmental Research and Education: Urban wildlife

Conducts statewide research and education programs to create and maintain ecologically significant habitats (including waterways and forests) in and around urban areas as traditional wildlife habitats are lost. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$87,841	\$0	\$79,241	\$0	\$0	\$8,600	2.40
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Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Examine urban wildlife planning issues from the macro level (regions, states, counties, and cities) to the individual site. Educate involved stakeholders on the diverse issues and concerns involved in attracting and/or managing wildlife in urban and suburban areas. Encourage community and governmental leaders to plan for urban wildlife green spaces and waterways as part of a national effort. Assist in the development and implementation of urban wildlife plans and models for municipalities and developers, including green spaces, waterways and forests.

Outcome Measures:

Develop and deliver education programs on urban wildlife management for landowners, homeowners, nuisance wildlife control operators, natural resource professionals and Extension agents. Extension programs reached 485 participants.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1512 Growth and Population Research and Education

Conducts applied research and education on population growth and its impact on urban planning and land use in coastal South Carolina. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the marketing and enhancement of the economic and social value of

SC's natural resources.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$7,682	\$0	\$4,482	\$0	\$0	\$3,200	0.20

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Address the growing information needs of the resource management and planning community through spatial technology products. Create visual products that enhance environmental knowledge, social science and policy

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education. Make complex spatial analysis understandable to a wider audience and transfer this information via the Internet and network resources.

Outcome Measures:

The Upstate growth projection model was completed and presented in spring 2008 covering the Reedy River watershed in 8 counties of the I-85 corridor. This complements the earlier coastal growth projection and is the basis to begin discussions for developing water policies to balance water availability with the needs of new industries or new residents.

Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1513 Community and Economic Affairs Research and Education

Conducts applied research and education in public policy areas to promote discussion and action on critical economic development issues facing South Carolina, the Southeast and the nation. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the conditions for economic growth

Strategy: Provide for a more unified and focused effort in the marketing of our State's assets.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$104,852	\$0	\$28,452	\$0	\$0	\$76,400	1.12

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Address local, state and regional and international policy issues through research. Provide information about emerging and current issues to policy makers and citizens, including information on data and data sources. Promote the discussion of policy options. Prepare reports and present workshops profiling South Carolina communities. Develop and provide methodologies for community enhancement and development. Conduct studies and make presentations on government finance, annexation, consolidation, tax policy, fiscal impact issues, economic development policy, planning, infrastructure investment, community planning and nature-based tourism. Provide expertise by participation in local, state, and regional initiatives.

Outcome Measures:

25 presentations were made to civic groups and community leaders to share research findings on growth projection models, demographics and population trends, economic trends and taxation issues in addition to 120 public radio programs that reach approximately 20,000 listeners. A regional approach for building economic

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resilience is in development.

Agency: P20 - Clemson PSA Functional Group: Economic

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Development & Natural Resources

1514 Sustainable Agricultural Production Systems: Agronomic Crops

Conducts statewide research and education programs to improve the production efficiency, environmental sensitivity, and profitability of agronomic crop management systems. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the protection of outcome-driven policies / incentives / programs aimed

at ecological sustainability.

FY 2008-09

Total	General	Federal	Health / Non-	CRF	Other	
	Funds	Funds	Recurring		Funds	FTEs
\$8,599,196	\$6,467,985	\$1,249,709	\$0	\$0	\$881,502	97.56

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: III, IV, VIIIC

Expected Results:

Conduct research and education programs to: Improve profitability of agronomic cropping systems; Reduce negative environmental impacts of agronomic cropping systems; Encourage adoption of new agronomic production systems; Encourage adoption of alternative methods of nutrient and pest management; Explore potential agricultural crops for use as biofuels.

Outcome Measures:

Develop and deliver education programs on agronomic crop production for agricultural producers, Extension and other agency personnel. Peanut management programs improved crop yields by 100 lbs/acre on 40,000 acres, generated an increase of \$1 million for growers. Wheat production recommendations resulted in an average 4% improvement in yield on 200,000 acres, producing a \$2.4 million increase for growers. Ongoing research focused on new technologies and management systems to improve crop yields and resistance to diseases and pests, and reduce inputs of fertilizer, water and pesticides, Research generated 1 patent application.

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Agency: P20 - Clemson PSA Functional Group: Economic

Development & Natural Resources

1515 Household and Structural Pest Control and Pesticide Training

Clemson PSA is the sole source for statewide pesticide safety education and training of pest control professionals. Sections 46-7-10 et seq. of the SC Code of Laws authorizes Clemson-PSA to conduct Agricultural Research and to carry out Extension work as assigned by law.

Statewide Result Area: Improve the quality of South Carolina's natural resources

Strategy: Provide for the minimization of negative effects related to business and population

growth, industrialization and development.

FY 2008-09

Total	General Funds	Federal Funds	Health / Non- Recurring	CRF	Other Funds	FTEs
\$540,974	\$280,345	\$146,145	\$0	\$0	\$114,484	8.50

Other Fund - Subfund No & Title:

3035-Op Revenue

Budgetary Program No.: IV, VIIIC

Expected Results:

Conduct statewide education programs to identify, prevent and correct health and structural problems related to household pests and wood-destroying organisms in the home and work environment through training and education. Provide pesticide training programs for SC applicators (private and commercial) to protect applicators, the general public and the environment from misuse of pesticides.

Outcome Measures:

Pest control professionals, building owners, agricultural growers/producers and landscape maintenance professionals are trained in safe methods to reduce damage by insects and other pests. 482 pesticide applicators were trained for certification / recertification as required by state and federal regulations, In addition, 874 individuals were trained in pest control practices for human environments and 772 individuals were trained in controlling wood destroying insect pests.

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AGENCY TOTALS

Clemson PSA

TOTAL AGENCY	TOTAL GENERAL	TOTAL FEDERAL	TOTAL OTHER
FUNDS	FUNDS	FUNDS	FUNDS
\$70,078,561	\$44,198,346	\$13,298,999	\$12,306,216
	TOTAL HEALTH/NON-	TOTAL CAPITAL	TOTAL
	RECURRING FUNDS	RESERVE FUNDS	FTEs
	\$275,000	\$0	867.95

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